# **APPENDIX A**

to declaration by Tetsuya Gatanaga, Ph.D.

Curriculum Vitae

# CURRICULUM VITAE - Tetsuya Gatanaga, Ph.D.

Name

Family name:

Gatanaga

First name:

Tetsuya

Position

Senior Vice President and Chief Operating Officer

Meyer Pharmaceuticals, LLC (Applied Immunotherapeutics,

LLC)

4320 Von Karman, Newport Beach, CA 92660

Place of Birth

Kamioka-cho, Yoshiki-gun, Gifu Prefecture, Japan.

Date of Birth

26 July 1954

Nationality

Japan

(Permanent Resident of U.S.A.)

Social Security Number

613-26-4142

Home Address

77 Wellesley Irvine, CA 92612, U.S.A.

**Marital Status** 

Married

Education

1978.4.-1982.3.

Faculty of Pharmaceutical Sciences, Teikyo University.

1982. 3.

Awarded the degree of Bachelor of Pharmacology.

1982.4-1984.3.

Faculty of Pharmaceutical Sciences, Teikyo University.

1984.3.

Awarded the degree of Master of Science.

1984.4-1987.3.

Faculty of Pharmaceutical Sciences, Teikyo University.

## 1987. 3.

Awarded the degree of Doctor of Philosophy.

(Yakugaku Hakase : literal translation is Doctor of Pharmacology)

Thesis Title: Construction of novel recombinant tumor necrosis factor (rTNF-S) and its anti-tumor activity.

Work was supervised by Professor Mizuno

# Research and Professional Experience

### 1987.4-1987.9.

Postdoctoral Researcher, Research Development, Corporation of Japan.

#### 1987.10.-1989.5.

Research Investigator (JYOSHU in Japanese) Biotechnology Research Center, Teikyo University Kanagawa 199-01, Japan.

### 1989.6.-1990.3.

Postdoctoral Researcher, University of California, Irvine.

# 1990.4.-1996.6.

Assistant Research Biochemist

Department of Molecular Biology & Biochemistry and

Cancer Research Institute

University of California, Irvine, Irvine CA 92697-3900

### 1996.7-1999.3

Associate Director of Applied Immunotherapeutics Clinical Production Laboratory,

Meyer Pharmaceuticals, LLC (Applied Immunotherapeutics, LLC)

4320 Von Karman, Newport Beach, CA 92660

## 1999.4-Present

Senior Vice President and Chief Operating Officer

Meyer Pharmaceuticals, LLC (Applied Immunotherapeutics, LLC)

4320 Von Karman, Newport Beach, CA 92660

# Membership of Academic Societies

Society for Leukocyte Biology
The American Association of Immunologists
American Association for Cancer Research
Japan Cancer Association
The Japanese Biochemical Society
The Molecular Biology Society of Japan
American Society for Quality

## **Editorial Boards**

Journal of Interferon and Cytokine Research (1992-present)

## Reviewer

The Journal of Immunology
Cancer Research
The American Journal of Pathology
Gynecologic Oncology

### Grants

#### 1990-1991:

American Cancer Society (ACS) Institutional Research Grant:

TNF receptor mRNA synthesis, membrane expression and release by human tumor cell lines in vitro.
\$15,000

1992-1993:

Cancer Research Coordinating Committee Grant:
Regulation and production of blocking factor to TNF bioactivity from ovarian cancer cell in vitro.
\$25,000

## 1994-1995:

Arthritis National Research Foundation:

Purification of protease(s) released by stimulated THP-1 cells which cleaves the 75 kD membrane receptor into the 40 kD TNF BP.

\$37,500

# Technical Experience

1. Biochemical and Molecular Biology

Purification of proteins
Isolation and purification of RNA and DNA
Molecular cloning techniques
Production and purification of cloned proteins using
E.coli. systems

# 2. Therapy

In vivo anti-tumor therapy, primarily using BRMs

# 3. Cytology

Cell culture (including assays of multiple cytokines)

## PUBLICATION LIST

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- 1. Abe S., <u>Gatanaga T.</u>, Yamazaki M., Soma G-I. and Mizuno D. Purification of rabbit tumor necrosis factor. FEBS LETTER, 180: 203-206, 1985.
- 2. Takahashi K., Kisugi J., <u>Gatanaga T.</u>, Yamazaki M., Mizuno D. and Abe S. Induction of cytotoxic activity in sera by immunomodulators. YAKUGAKU ZASSHI, 105: 862-865, 1985. (in Japanese)
- 3. <u>Gatanaga T.</u>, Takahashi K., Yamazaki M., Mizuno D. and Abe S. Combination therapy with rabbit tumor necrosis factor and chemo- and immuno-therapeutic agents against murine tumors. Jpn. J. Cancer Res., 76: 631-636, 1985.
- Soma G-I., Murata M., Kitahara N., Gatanaga T. and Andoh T.
   Regulation of gene expression during redifferentiation of promyelocytic leukemia cells HL-60 by 12-O-Oetradecanoylphorbol-13-acetate. J. Pharmacobio-Dyn., 8: s-123, 1985.
- 5. Soma G-I., Murata M., Kitahara N., <u>Gatanaga T.</u>, Shibai H., Morioka H. and Andoh T. Detection of a countertranscript in promyelocytic leukemia cells HL-60 during early differentiation by TPA. Biochem. Biophys. Res. Commun., 132: 100-109, 1985.
- 6. Kato M., Kakehi R., Soma G-I., <u>Gatanaga T.</u> and Mizuno D. Anti-tumor therapy by induction of endogenous tumor necrosis factor. Lancet, ii: 270, 1985.
- 7. <u>Gatanaga T.</u> Construction of novel recombinant tumor necrosis factor (rTNF-S) and its anti-tumor activity. Doctoral Thesis 1987. Teikyo University.
- 8. Inagawa H., Oshima H., Minamikawa M., <u>Gatanaga T.</u>, Soma G-I. and Mizuno D. Novel tumor therapy; Combination therapy of endogenous TNF induction and local injection of recombinant TNF (endogenous and exogenous TNF:

EET therapy) in mice. IN: Process in antimicrobial and anticancer chemotherapy 3, anticancer section, edited by Berkarda B. and Kummerle H.P., 141-143, 1987.

- 9. Tsuji Y., Soma G-I., Kitahara N., <u>Gatanaga T.</u>, Oshima H., Noguchi K., Tanabe Y. and Mizuno D. Recombinant TNF-S and its anti-tumor activity. In: Process in antimicrobial and anticancer chemotherapy 3, anti-cancer section, edited by Berkarda B. and Kummerle H.P., 162-164, 1987.
- 10. Soma G-I., Tsuji Y., Kitahara N., Oshima H., <u>Gatanaga T.</u>, Inagawa H., Kato M., Takagi K., Dobashi K., Noguchi K., Tanabe Y. and Mizuno D. Novel recombinant TNF molecules (rTNF-S) having a broad cytotoxic spectra to various cancer cells by alteration of amino acids sequence in its N-terminal region. Immunobiology, 9: 175 (1/2), 34-35, 1987.
- Soma G-I., Kitahara N., Tsuji Y., Oshima H., Kato M., Gatanaga T., Inagawa H., Noguchi K., Tanabe Y. and Mizuno D. Improvement of cytotoxicity of tumor necrosis factor (TNF) by increase in basicity of its N-terminal region. Biochem. Biophys. Res. Commun., 148: 629-635, 1987.
- 12. Soma G-I., Tsuji Y., Tanabe Y., Noguchi K., Kitahara N., <u>Gatanaga T.</u> Inagawa H., Kawakami K. and Mizuno D. Biological activities of novel recombinant tumor necrosis factors having N-terminal amino acid sequences derived from cytotoxic factors produced by THP-1 cells. J. Biol. Resp. Mod., 7: 587-595, 1988.

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- Murata M., Kitahara T., Shibai H., Morioka M., Gatanaga T., Andoh T. and Soma G-I. Regulation of gene expression during early differentiation of promyelocytic leukemia cells HL-60. Life Sciences Advances, 6: 147-151, 1988.
- 14. Kitahara N., Nishizawa T., <u>Gatanaga T.</u>, Okazaki H., Andoh T. and Soma G-I. Primary structure of two mRNAs encoding putative salmon beta-subunits of pituitary glycoprotein hormone. Comp. Biochem. Physiol., 91B: 551-556, 1988.

- 15. Tsuji Y., Kitahara-Tanabe N., Noguchi K., <u>Gatanaga T.</u>, Mizuno D. and Soma G-I. Production in Escherichia coli of human thymoshin beta 4 as chimeric protein with human tumor necrosis factor. Biochemistry International, 18: 501-508, 1989.
- 16. <u>Gatanaga T.</u>, Noguchi K., Tanabe Y., Inagawa H., Soma G-I. and Mizuno D. Anti-tumor effect of systemic administration of novel recombinant tumor necrosis factor (rTNF-S) with less toxicity than that of rTNF-alpha *in vivo*. J. Biol. Resp. Mod., 8: 278-286, 1989.
- 17. <u>Gatanaga T.</u>, Lentz R., Masunaka I., Tomich J., Jeffes E., Baird M. and Granger G. Identification of TNF-LT blocking factor(s) in the serum and Ultrafiltrates of human cancer patients. Lymphokine Res., 9: 225-229, 1990.
- 18. Schall T.J., Lewis M., Koller K.J., Lee A., Rice G.C., Wong G.H., Gatanaga T., Granger G., Lents R., Raab H., Kohr W. and Goeddel V. Molecular cloning and expression of a receptor for human tumor necrosis factor. Cell, 61: 361-370, 1990.
- 19. <u>Gatanaga T.</u>, Hwang C., Kohr W., Cappuccini F., Lucci J.A., Jeffes E.W.B., Lentz R., Tomich J., Yamamoto R., and Granger G. Purification and characterization of an inhibitor (soluble TNF receptor) for TNF and LT obtained from the serum ultrafiltrate of human cancer patient. Proc. Natl. Acad Sci. U.S.A., 87: 8781-8784, 1990.
- Dett C.A., Gatanaga M., Ininns E.K., Cappuccini F., Yamamoto R.S., Granger G.A. and Gatanaga T. Enhancement of lymphokine activated T-killer cell (T-LAK) TNF receptor (TNF-R) mRNA transcription, TNF-R membrane expression and TNF/LT release by IL-1\*, IL-4 and IL-6 in vitro. J. Immunol., 146: 1522-1526, 1991.
- 21. Cappuccini F., Yamamoto R.S., DiSaia P.J., Grosen E.A., Gatanaga M., Lucci J.A., Ininns E.K., <u>Gatanaga T.</u>, Granger G.A. Identification of tumor necrosis factor and lymphotoxin blocking factor(s) in the ascites of patients with advanced and recurrent ovarian cancer. Lymphokine and Cytokine Res., 10:

225-229, 1991.

- Hwang C., Gatanaga M., Ininns E., Yamamoto R., Granger G. and <u>Gatanaga</u>
  <u>T.</u> A 20 AA synthetic peptide of a region from the 55 kD human TNF receptor inhibits cytolytic and binding activities of recombinant human TNF in vitro. Proc. R. Soc. Lond. B, 245: 115-119, 1991.
- 23. <u>Gatanaga T.</u>, Hwang C., Gatanaga M., Cappuccini F., Yamamoto R.S. and Granger G.A. The regulation of TNF receptor in mRNA synthesis, membrane expression and release by PMA and LPS stimulated human monocytic THP-1 cells in vitro. Cell. Immunol., 138: 1-10, 1991.
- 24. Granger G.A., Yamamoto R., Gatanaga T., Cappuccini F., Jeffes E.W.B. and Jakowatz J. Lymphotoxin, macrophage toxins tumor necrosis factor and cachectin. Tumor necrosis factor: structure-function relationship and clinical application, Basel, Karger, 25-33, 1991.
- Granger G.A., Gatanaga T., Yamamoto R.S., Abe Y., Grosen E., Cappuccini F., Jeffes E., Jakowatz J. and DiSaia P. Studies on the action of human TNF/LT and their blocking factors in cancer patients. Serono Symposia Review Rome, 25: 35-39, 1991.
- Ininns E.K., Gatanaga M., Cuppuccini F., Dett C.A., Yamamoto R.S., Granger G.A. and <u>Gatanaga T.</u> Growth of endometrial adenocarcinoma cell line AN3 CA is modulated by tumor necrosis factor and its receptor is upregulated by estrogen in vitro. Endocrinology, 130: 1852-1856, 1992.
- 27. Abe Y., Miyake M., Osuka Y., Kimura S., Granger G.A. and <u>Gatanaga T.</u> Studies of membrane associated and soluble (secreted) lymphotoxin in human lymphokine activated T-killer (T-LAK) cells *in vitro*. Lymphokine and Cytokine Res., 11: 115-121, 1992.
- 28. Cappuccini F., Lucci J.A., Disaia P.J., Dett C.A., Gatanaga M., Ininns E.K., Gatanaga T., Yamamoto R.S., Manetta A. and Granger G.A. Trafficking of syngeneic murine lymphokine activated killer T cell (T-LAK cells) following intraperitoneal administration in normal and tumor bearing mice.

Gynecologic oncology, 46: 163-169, 1992.

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- 29. Ininns E.K., Gatanaga M., Van Eden M., Knudsen K.L., Granger G.A. and Gatanaga T. The autocrine role of tumor necrosis factor in the proliferation and functional differentiation of Human lymphokine activated T killer cell (T-LAK) in vitro. Cytokine, 4; 391-396, 1992.
- 30. Abe Y., Miyake M., Osuka Y., Kimura S., Granger G.A. and <u>Gatanaga T.</u>
  Transforming growth factor β downregulates expression of membrane associated lymphotoxine and secretion of soluble lymphotoxine of human lymphokine activated T-killer (T-LAK) cells *in vitro*. Lymphokine and Cytokine Res., 11: 245-251, 1992.
- 31. Grosen E.A., Yamamoto R.S., Ioli G., Ininns E.K., Gatanaga M., Gatanaga T. Lucci J.A., DiSaia P.J., Berman M., Manetta A. and Granger G.A. Blocking factors (soluble membrane receptors) for tumor necrosis factor and lymphotoxin detected in ascites and released in short-term cultures obtained from ascites and solid tumors in women with gynecologic malignancy. Lymphokine and Cytokine Res., 11: 347-353, 1992.
- 32. <u>Gatanaga T.</u> and Granger G.A. Basic and clinical studies of soluble TNF/LT receptors. Tumor necrosis factor: structure-function relationship and clinical application, Basel, Karger, 187-190, 1993.
- Abe Y., Gatanaga M., Osuka Y., Kimura S., Burger R.A., Granger G.A. and Gatanaga T. Role of 55 kD and 75 kD TNF/LT membrane receptors in the regulation of ICAM-1 expression by HL-60 human promyelocytic leukemia cells in vitro. J. Immunol., 150: 5070-5079, 1993.
- 34. Grosen A.E., Granger G.A., Gatanaga M., Ininns E.K., Hwang C., DiSaia P., Berman M., Manetta A. and <u>Gatanaga T.</u> Measurement of the soluble membrane receptors for tumor necrosis factor and lymphotoxin in the serum of patients with gynecologic malignancy. Gynecologic oncology, 50: 68-77, 1993.
- 35. Scannell G., Kaml G.J., Ioli G., Gatanaga T., Yamamoto R., Granger G., and

Waxman K. Hypoxia induces human macrophage cell line to release tumor necrosis factor alpha and its soluble receptors in vitro. J. Surgical Res., 54: 281-285, 1993.

- 36. Olsson I., Gatanaga T., Gullberg U., Lantz M. and Granger G.A. Tumor necrosis factor (TNF) binding proteins (soluble TNF receptor forms) with possible role in inflammation and malignancy. Eur. Cytokine Netw., 4: 169-180, 1993.
- 37. Gatanaga M., Hwang C., Grosen E. A., Lucci J.A., DiSaia P.J., Granger G.A. and <u>Gatanaga T.</u> Induction of TNF/LT blocking factor (soluble receptor) release from a human ovarian tumor cell line (PA-1) by stimulation with various cytokines *in vitro*. Lymphokine and Cytokine Res., 12: 249-253, 1993.
- 38. Abe Y., Van Eden M., Gatanaga M., Wang F.I., Brightbill H.D., Granger G.A., and <u>Gatanaga T.</u> The role of lymphotoxin in the IL-2 driven differentiation human lymphokine activated T-killer (T-LAK) cells in vitro. Lymphokine and Cytokine Res., 12: 279-284, 1993.
- 39. Hwang C., Gatanaga M., Granger G.A., and <u>Gatanaga T.</u> Mechanism of release of soluble forms of TNF/LT receptors by Phorbal Myristate Acetate stimulated human THP-1 cells *in vitro*. J. Immunol., 151: 5631-5638, 1993.
- 40. Burger R A., Grosen A.E., Ioli G.I., Van Eden M., Brightbill H.D., Gatanaga M., DiSaia P., Granger G.A. and <u>Gatanaga T.</u> Release of tumor necrosis factor, Interleukin-1, and their inhibitors by isolated lymphoid and tumor cell populations from human ovarian carcinoma. Gynecologic oncology, 55: 294-303, 1994.
- 41. Burger R.A., Grosen A.E., Ioli G.I., Van Eden M., Berman M., Manetta A., DiSaia P., Granger G.A. and <u>Gatanaga T.</u> Spontaneous release of Interlekin-6 by primary culture of lymphoid and tumor cell population purified from human ovarian carcinoma. J. Interferon and Cytokine Res., 15: 255-260, 1995.
- 42. Gon S., Gatanaga T. and Sendo F. Involvment of two types of TNF receptor in

TNF-a induced neutrophil apoptosis. Microbiol. Immunol., 40: 463-465, 1996.

- 43. Katsura K., Park M., Gatanaga M., Yu E.C., Kakishima K., Granger G.A. and Gatanaga T. Identification of the proteolytic enzyme which cleaves human p75 TNF receptor *in vitro*. Biochem. Biophys. Res. Commun., 222: 298-302, 1996.
- 44. Choi S.S., Gatanaga M., Granger G.A. and <u>Gatanaga T.</u> Prostaglandin-E<sub>2</sub> regulation of tumor necrosis receptor release in human monocytic THP-1 cells. Cell. Immunol., 170: 178-184, 1996.
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### ABSTRACT

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- G-I. Soma, N Kitahara, T. Gatanaga, M. Kato, S. Abe, M. Yamazaki and D. Mizuno. Expression of multi-species of recombinant tumor necrosis factor (TNF) in E. coli. and comparison of their cytocidal effect against tumors.
   14th International Cancer Congress 1986 (Budapest) 3534.
- 2. G-I. Soma, N. Kitahara, T. Gatanaga, H. Inagawa, H. Oshima and D. MIzuno. Isolation and characterization of anti-tumor proteins (TNF-S) whose cytocidal activity were almost same as endogenous TNFs. 1986 Japan Cancer Congress, 1054.
- K. Dobashi, S. Hirata, S. Takeshita, T. Tsuji, S. Okinaga, K. Arai, T. Seto,
   G-I.Soma, Y. Tsuji, T. Gatanaga, K. Noguchi, Y. Tanabe, H. Oshima and D.
   Mizuno. Clinical application of novel recombinant TNF (TNF-S). 1987; Japan Cancer Congress, 1273.
- 4. G-I. Soma, Y. Tsuji, N. Kitahara, T. Gatanaga, K. Noguchi, H. Inagawa, H. Oshima, D. Mizuno and M. Kato 1987; Japan Cancer Congress. 1435.
- T. Gatanaga, N. Kitahara, M. Kato, H. Oshima, H. Inagawa, K. Noguchi, Y. Tanabe, D. Mizuno and G-I. Soma. Preparation of novel tumor necrosis factor (TNF-S) 1987; The Molecular Biology Society of Japan 1E-11.
- Y. Tanabe, N. Kitahara, K. Noguchi, T. Gatanaga, H. Oshima, D. Mizuno and G-I. Soma. Relationship of N-terminal structure of TNF-S and bioactivity. 1987; The Molecular Biology Society of Japan 1E-12.
- 7. Y. Tsuji, M. Murata, N. Kitahara, T. Gatanaga, D. Mizuno and G-I Soma. mRNA of expression during early differentiation. 1987; The Molecular Biology Society of Japan 4c-30.
- 8. N. Kitahara-Tanabe, T. Gatanaga, H. Oshima, G-I. Soma and D. Mizuno. Mechanism of production of tumor necrosis factor through priming and/or triggering step in rabbit pulmonary macrophages. 1988; Japan Cancer Congress 1656.

- 9. T. Gatanaga, K. Noguchi, Y. Tanabe, H. Inagawa, H. Oshima, G-I. Soma and D. Mizuno. Acute toxicity and anti-tumor effects in vivo of novel recombinant tumor necrosis factor (rTNF-S group) 1988; Japan Cancer Congress.
- 10. H. Inagawa, K. Noguchi, Y. Tsuji, Y. Tanabe, T. Gatanaga, H. Oshima, G-I. Soma and D.Mizuno. Anti-tumor effects of novel chimera TNF with thymosine syngeneic murine tumor. 1989; Japan Cancer Congress 1574.

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- 11. T. Gatanaga, C. Hwang, J. Tomich, R. Lentz, W. Kohr and G. Granger. Purification of characterization of TNF/LT blocking factor(s) in the serum and ultrafiltrates of human cancer patients. 1990; 15th International Cancer Congress A3.103.17.
- T. Gatanaga, C. Hwang, T.J. Schall, W. Kohr, D.V. Goeddel, R.S. Yamamoto and G.A. Granger. Purification and characterization of inhibitor (soluble TNF receptor) for TNF and LT obtained from the serum ultrafiltrates of human cancer patients. 1990; 3rd International Conference on Tumor Necrosis Factor and Related Cytokines P2A-16.
- 13. C. Hwang, M. Gatanaga, E.K. Ininns, R.S. Yamamoto and G.A. Granger and T. Gatanaga. 20 AA synthetic peptide of a region from the 55 kD human TNF receptor inhibits cytolytic and binding activities of recombinant human TNF in vitro. 1991; National Meeting of the Society for Leukocyte Biology 297.
- 14. E.K. Ininns, M. Gatanaga, R.S. Yamamoto, G.A Granger and T. Gatanaga. The autocrine role of tumor necrosis factor and lymphotoxin in the proliferation and differentiation of human lymphokine activated T-killer cells (T-LAK) in vitro. 1991; National Meeting of the Society for Leukocyte Biology 314.
- T. Gatanaga, E. Grosen, F. Cappuccini, J. Lucci, M. Gatanaga, A. Manetta and G. Granger. Bioactivity of a shed surface receptor for tumor necrosis factor and lymphotoxin in the serum of cancer patients. The Western Association of Gynecologic Oncologists. 1991; 12 June.

16. C. Hwang, M. Gatanaga, E.K. Ininns, R.S. Yamamoto, G.A. Granger and T.Gatanaga. A 20 AA synthetic peptide of a region from the 55 kD human TNF receptor inhibits cytolytic and binding activities of recombinant TNF in vitro. 1991; Third International Workshop on Cytokines 151.

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- 17. E. Ininns, C. Dett, R.S. Yamamoto, G. Granger and T. Gatanaga. The role of cytokines in the growth, differentiation, and cytotoxicity of human T-LAK cell. 1991; Third International Workshop on Cytokines 240.
- 18. E. Grosen, R.Yamamoto, G.Ioli, T. Gatanaga, E. Ininns, P. DiSaia and G. Granger. Primary tumor cultures from patients with gynecologic malignancies release TNF/LT blocking factors in vitro. 1991; Third International Workshop on Cytokines 311.
- M. Gatanaga, E. Grosen, P. DiSaia, M. Berman, A. Manetta, T. Gatanaga, G. Granger. Induction of tumor necrosis factor (TNF) receptor shedding from a human ovarian tumor cell line (PA-1) by stimulation with various cytokines in vitro. 1992; 39th Annual Meeting of Society for Gynecologic Investigation 193.
- Y. Abe, G.A. Granger and T. Gatanaga. Lymphotoxin system of human lymphokine activated T-killer cell: studies on membrane associated and soluble secreted lymphotoxin. 1992, FASEB Meeting 2316.
- E.K. Ininns, C.A. Dett, R.S. Yamamoto, M. Gatanaga, G.A. Granger and T. Gatanaga. The roles of IL-4, IL-6, TNF and LT in the proliferation, differentiation and cytotoxic effectiveness of human T-LAK cells. 1992 FASEB Meeting 2317.
- 22. C. Hwang, M. Gatanaga, G.A. Granger and T. Gatanaga. Mechanisms of release of soluble TNF membrane receptors by human THP-1 cells in vitro. 1992 FASEB Meeting 3880.
- M. Gatanaga, E. Grosen, P. DiSaia, T. Gatanaga, and G. Granger. Induction of tumor necrosis factor (TNF) receptor shedding from a human ovarian tumor cell line (PA-1) by stimulation with various cytokines in vitro. 1992, 4th International TNF Congress, The Netherlands, A-55.

- 24. C. Hwang, M. Gatanaga, G.A. Granger and T. Gatanaga. Mechanisms of release of soluble TNF membrane receptors by human THP-1 cells in vitro. 1992, 4th International TNF Congress, The Netherlands, A-57.
- E. Ininns, M. Gatanaga, M. Van Eden, Knudsen K., G. Granger and T. Gatanaga. The autocrine role of tumor necrosis factor in the proliferation and functional differentiation of human lymphokine activated T-killer cells (T-LAK) in vitro. 1992 4th International TNF Congress, The Netherlands, B-2.
- E. Grosen, P. DiSaia, M. Berman, A. Manetta, T. Gatanaga, G. Granger. Measurement of soluble receptors for tumor necrosis factor and comparison to CA-125 in the sera of patients with gynecologic malignancy. 1992, 4th International TNF Congress, The Netherlands, D-40.
- 27. M. Gatanaga, E. Grosen, P. DiSaia, T. Gatanaga, and G. Granger. Induction of tumor necrosis factor (TNF) receptor shedding from a human ovarian tumor cell line (PA-1) by stimulation with various cytokines in vitro. 1992, 83th Annual Meeting of the American Association for Cancer Research, 1785.
- E. Grosen, P. DiSaia, M. Berman, A. Manetta, T. Gatanaga, G. Granger. Clinical evaluation of soluble receptors for tumor necrosis factor and comparison to CA-125 in the serum of patients with gynecologic malignancy. 1992, 83th Annual Meeting of the American Association for Cancer Research, 2072.